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ABSTRACT

This paper presents an overview of the evolution of the Yale University Child Study Center's School Development Program (SDP) since its implementation in New Haven, Connecticut in 1968. The needs of inner city school children are discussed, and results of parent and staff surveys are presented. A critique of alternative school improvement strategies is given, with particular emphasis on their limitations compared to SDP. Mental health correlates of school-related adjustment are discussed as are the principles, assumptions, and rationale for the ecological design of SDP. The specifics of implementing the program in New Haven are given, including the population and personnel, and results of research on the indirect and direct impact of SDP. The results of a 1982 pilot study are reported also, including data on social competence, achievement tests, and grade point averages. Prevention and public policy are discussed in regard to the court mandated implementation of SDP in the Benton Harbor, Michigan School District. A description of the Benton Harbor program, clarifying some of the complex issues and relationships among educational, psychological, and legal and community interest groups involved in the process of implementing the program, is provided. The paper concludes with a discussion of the implications for public policy of court-ordered prevention programs. Two figures are appended to illustrate the SDP model and the implementation process in the Benton Harbor schools. (BL)

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Prevention Services in Urban Elementary Schools

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Running head: Prevention in Urban Schools

Abstract

Prevention Services in Urban Elementary Schools

The paper considers the implications of a court mandated prevention program in an urban school district. The Yale University Child Study Center's School Development Program (SDP) constitutes a major prevention intervention in the educational system. It ranks high among the small number of prevention programs in the school setting and is the only "Effective Schools" [illegible] with a mental health focus. The program is broad-based intervention program and unlike other programs which intervene on the classroom level, the program is a school-level intervention. The program has been operating in the school system of New Haven, Connecticut since 1968. In the spring of 1980, Judge Douglas W. Hillman ordered the implementation of the program in Benton Harbor, Michigan School District. Provided is a description of the program clarifying some of the complex issues and relationships among educational, psychological, legal and community interest groups involved in the process of implementing the program. Discussed are the implications of a court ordered prevention program on public policy.

Prevention Services in Urban Elementary Schools

Developing and improving schools, as educational organizations, is a most important, challenging and, indeed, complex endeavor. It involves people, processess, forces, and events both within and outside the organizational setting. Clearly, educational organization change, particularly planned change, is never easy or simplistic. Thus, change programs that seek to facilitate development and improvement of organizations need to be described, empirically documented (with quantitative and qualitative data) and reported in clear and concis. accounting in preventive psychology literature.

During the last fifteen years the mental health system has shown a great deal of readiness and enthusiasm for primary prevention (e.g., Bellak, 1969; Caplan, 1964; Cowen et al., 1967; Kelly, 1968). It has been recognized that schools can provide a unique opprotunity for the delivery of prevention services. Paralleling this development has been the growing the desirability of broad-based interventions rather than indvidualized intervention. The school environment has been identified as one of the most promising areas for braod-based intervention (Cowen, 1977). Interventions in schools are likely to yeild promising results because the school is a setting where children spend a great deal of time thereby providing the opportunity to optimize desired outcomes (Cowen & Lorion, 1976).

Second only to the family environment, the school environment is a powerful determinant of childhood psychological adjustment. The

behavior problems of school-aged children can be directly associated with 1) the environment of the school, 2) their academic performance, 3) their cognitive functioning and 4) their social-emotional adjustment. DSM III suggests that school maladjustment is a precursor to more severe problems in later life. Evidence exists to support that suggestion. Further, a growing body of literature exists to suggest that many of the behavior problems of young children can be prevented. The implications of the findings are tragically alarming for persons from minority and low-income families as they are at heightened risk for these problems and school failure. A significant feature of the School Development Program (SDP) is that the intervention is that it is targeted to a high risk group--minority children from low-income families.

The School Development Program constitutes a major prevention intervention in the educational system. It ranks high among the small number of prevention programs in the school setting and is the only "Effective Schools" model with a mental health focus (Edmonds, 1982). The program has been operating in the school systems of New Haven, Connecticut and Benton Harbor Michigan since 1968 and 1981 respectively.

In the spring of 1980, Judge Douglas W. Hillman ordered the SDP into the Benton Harbor School District. A description of the program and its components is provided and will clarify some of the complex issues and relationships among educational, psychological, legal and community interest groups involved in the process of implementation of the prevention program.

The implications of court mandated prevention programs on public policy in general and on prevention policy in particular (cf. Adler, et al., 1978) are considered. Provided is the evolution and history of the program as it existed in New Haven for 15 years prior to its adoption in the Benton Harbor district.

Evolution of the School Development Program

The history of the program is described by Comer (1980) and will not be detailed here. However, an overview of the program is necessary for the understanding of the confluence of values now operating in Benton Harbor, Michigan. The program was designed to address the problem of unequal educational opportunities in New Haven, Connecticut. What existed in New Haven in 1968 was a problem common to many urban areas of our country--that of "low achieving schools."

The needs of inner city school children such as those in the schools involved in this program are too well documented to need extensive elaboration here. The situation in the New Haven schools at the outset of the SDP was no different from that in other urban areas. Specifically: citywide testing in 1968 (Metropolitan Achievement Test, Form B) in reading revealed that in 11 of the 14 inner city schools from 50 to 88% of the students at the 6th grade level were reading below grade level. In slightly over half of these schools over 70% of the sixth graders were below grade level. In Arithmetic comprehension (Metropolitan Achievement Test) 47-87% of the children in inner city schools were below grade level (in one inner school, however, only 18% were below).

In March, 1968 a survey was taken by the New Haven Reading staff to determine current instructional reading levels. This survey was completed by classroom teachers in New Haven. The responses, although subjective in nature, indicated that at the fourth grade level 26% of the children in inner city schools were 2-3 years behind in reading.

Reports from teachers, principals, and social workers indicated that a high percentage of inner city children were not motivated, were disruptive or apathetic in class, unable to profit from the school setup as it existed, uninterested in traditional curriculum materials, etc.

Parents and community workers reported that the schools failed to instill a sense of identity and self respect in their children. Parents frequently felt alienated from the schools responsible for educating their children and wished to participate in them but felt powerless to do so.

Based on that situation, the four main needs identified as most important to be addressed by the SDP were:

1. the need of inner city children to improve their self image in the school setting and to raise their educational aspiration level;
2. the need of inner city children to acquire reading and other basic academic skills;
3. the need of inner city children for special enrichment activities to broaden their understanding of the world and to increase their motivation;

4. the need of school staff and parents to evolve zones of respective responsibility and defined areas of decision-making.

School Improvement Strategies

Numerous school improvement strategies were developed during the 1960s to address the problems of inner-city students (Bereiter & Engelmann, 1966; Grey & Klaus, 1966; Reissman, 1966; Willie, 1964). Each strategy or program was based on specific assumptions regarding the causes of the widespread academic underachievement of these children. This period in American education generated some of the most controversial ideas and policies concerning inner-city education and some of the most innovative solutions. Three of the most significant and well-known programs initiated during this period were Head Start, Follow Through and Title I of ESEA. Each of these was somewhat similar to the School Development Program--especially in the broad goal of improving academic achievement of young inner-city children. However, the SDP was unique among these programs in many respects, especially in its mental health approach regarding the elimination and prevention of the school problems. A brief description of each of the three programs mentioned will provide a general comparison with the SDP.

Project Head Start, which began in 1965 as a component of the Federal government's "war on poverty," was founded on the assumption that educational success for low-income children could be achieved by providing these children with intensive pre-kindergarten experiences in child development centers (Office of Economic Opportunity, 1965;

Osborn, 1968). Similar to the School Development Program, Head Start attempted to provide experiences which could prepare young children for both the academic and social demands of public schooling--experiences which were often not provided by parents or community services. In both programs' goals the parent-child relationship was an important element.

Unlike Head Start, however, the SDP chose to operate at the elementary school level. It was decided that by improving the public schools, more children could be affected and the educational system as a whole could be made more responsive to the millions of inner-city children who were a part of that system but not being adequately educated.

Although the two other innovative educational programs mentioned were also elementary school-based, they both differed from the SDP in fundamental ways. The Follow Through Program grew out of Head Start in 1968 and established a wide variety of efforts to sustain the momentum and benefits of Head Start experiences throughout the early elementary school years (Abelson, 1974; Office of Education, 1969). Similarly, Title I of the 1965 Elementary and Secondary Education Act attempted to provide extra resources and special programs for children of low-income families in order to compensate for an assumed lack of home-learning experiences which could prepare a child cognitively or socially for school (McLaughlin, 1975).

The School Development Program, unlike these two programs, was based on an assumption that educational improvement could be achieved primarily at an institutional level, less sucessfully at an

individual level. The entire school must be the focus of attention. All aspects of school functioning must be part of an ecological approach to educational improvement--building management and decision-making, staff development and supervision, parent involvement, curriculum planning, social and psychological services, extra-curricular activities, classroom management, and the myriad of personal interactions which take place between and among staff, parents and students on a day-to-day basis.

Critique of School Improvement Programs

The majority of school improvement strategies addressing inner-city schools, including the three discussed above, were based on a compensatory education model. However, many educators and psychologists felt that compensatory educational programs were not responsive to the demand for successful and meaningful education of large numbers of school children (Bloom, Davis, & Hess, 1965; Gordon, 1965). Programs for enrichment, remedial reading, ungraded classrooms, team teaching, and special education teachers were barely denting the bureaucracy of the educational system. Their effectiveness was usually dependent upon the ethos of the school community into which they are introduced. Preschool programs, while perhaps themselves useful, frequently had debatable longitudinal effects. Insofar as they often focused upon limited parental involvement, they may have served to reduce the alienation of parents from their children'seducational experience. Unfortunately, however, too many compensatory programs of this nature had totally unrealistic

plans with which to meet their own expectations for parental involvement; too many participants in such programs were unfamiliar with the communities in which they choose to serve.

Specific innovations such as programmed learning also had limited benefits. Teachers were frequently freed from rote-learning approaches to teaching tasks, but the more basic issues of concept formation and positive personality development were not being answered within such a context.

Finally, limited consultant services also proved to have spurious effects. The consultant was frequently not an integral part of the school's functioning, and thus rarely had the opportunity to evaluate his or her own effectiveness from the vantage point of the educational system. Furthermore, the consultant's effectiveness with a few teachers was often vitiated by the progress of the child or children involved in a new classroom setting and climate the following year. The diversity of teaching methods used, and the teacher's recurrent ignorance of the child's educational history often combined to negate any gains made earlier.

It was believed that most inner-city students' educational experience was segmented, routinized, gratuitously given, and frequently devoid of personal meaning. Theories of learning or personality development had little relevance within this context. Most important, basic behavioral science research findings and methods were typically not usable within the context of a highly structured, legalistically-oriented bureaucratic structure such as the public school. It was concluded that the school was not meeting

the psycho-developmental needs of its children, nor probably, the human needs of the educators involved.

Mental Health Correlates with School-Related Adjustment

School-related psychological adjustment has been given considerable attention by researchers over the past 15 years. Numerous writers have attempted to identify and operationalize some of the important factors influencing school-related psychological development. Three of the more fruitful variables are climate (Trickett & Moos, 1974; Wright & Cowen, 1982), self-concept (Hamachek, 1978; Purkey, 1970), and parental perceptions and interactions (Brookover et al., 1965, 1967; Walters & Stinnett, 1971).

With regard to climate variables, school management and leadership has been shown to be of vital importance in rearranging relationships, facilitating attention to multiple conditions and generally improving school functioning and student achievement (Brookover et al., 1983; Clark et al., 1980; Edmonds, 1982; Foster, 1971; Rutter et al., 1979).

Poznanski (1981), Weinberg (1973) and Petti (1978) have reported decreased concentration or change in school performance is one of the major symptoms utilized to diagnose depression. School climate may have an affect on the level of anxiety experienced by children. Hunt and Cohen (1984) suggest that children's learning difficulties may result in anxiety producing situations. They go on to state that "self-esteem and the ability to tolerate anxiety and frustration are necessary prerequisites to academic achievement in a classroom

setting with peers and teachers" (p. 481).

Self concept has been and continues to be a popular variable in research. Several studies have reported that children who frequently fail in school tend to have lower general self-concepts (e.g., Primavera et al., 1975; Bloom, 1976). On the other hand, a number of researchers have failed to find a relationship between measures of general self-concept and school achievement (e.g., Cobb et al., 1975; Chang, 1976).

Of particular interest to the program study are the results of a study which focused on ways of enhancing academic self-concept as a means of improving school achievement. Brookover, et al. (1965) found that when parent's expectations for and evaluations of their children's academic performance were raised, significant increases in academic self-concept. In summary, evidence on children's self concept and school performance is inconclusive concerning the relationship between these two variables (Bettschen et al., 1977).

The literature has supported the intervention approach taken by the SDP in 1968. Children who perform poorly at school are logical targets for early intervention (Kessler & Albee, 1975). They constitute approximately 75% of childhood clinical referrals (Eme, 1979). School achievement correlates with most childhood measures of adjustment with almost every form of adult maladjustment except suicide and neurosis (Kohlberg et al., 1970; Roff et al., 1976). Cowen and Lorion (1976) have described school-based primary prevention programs as a reasonable approach to addressing childhood mental health problems. The importance of home-school interaction,

cooperation and support for educational programs for achieving improvements in student achievement has been addressed by a number of studies since the inception of the SDP (Comer, 1980b; Davies, 1976; Kagan & Schraft, 1979; Lightfoot, 1978).

Bloom (1976) reported programs of school innovation are most effective when a number of school conditions are addressed simultaneously. A schoolwide systems oriented or ecological approach allows a staff to address multiple conditions and to rearrange or improve the interrelationships between the social system--the school staff and programs--and the individuals who make up the systems--staff, parents, and students (Comer, 1980b; Kelly, 1968; Lightfoot, 1978).

The SDP: An Ecological Intervention

The SDP intervention was not derived from any specific intervention theory or model. However, it contains critical elements of several theories which were articulated after its inception. These include the population adjustment model (cf. Becker, Wylan and McCourt, 1971; Hartmen, 1979), the social action model (Reiff, 1966). With regard to the adjustment model, the SDP applies preventive strategies to a group who have an educational problem but have not shown signs of mental illness. Further, it seeks the best possible adaptation of children to the school environment.

The SDP resembles a social action model in that it attempts to serve children through social change. More specifically, it seeks to open social structures to a variety of inputs, build parent involvement and empower a community. While the intervention contains

elements and resembles the adjustment and social action models, it is best conceptualized as an example of the ecological approach to prevention (Kelly, 1966).

In the broadest sense, the ecological approach to interevention may be seen as a restatement of Lewin's (1936) model of social psychology: "Behavior is a function of person and environment." The refinement of the statement for use among clinical psychologists with a prevention orientation has resulted in a set of concrete principles of "the envionment." The adoption of this approach in intervention and research has been urged by many mental health professionals (e.g., Weinstein and Frankel, 1974).

Kelly (1968) proposed an ecological framework for conceptualizing preventive invterventions. He noted that the primary focus for designing programs was the "interrelationships between the fuention of [the] social unit and individual member" (p. 76). Kelly posited four governing principles for investgating ecological systems. The principles of the ecological model will be reviewed along with additional corollaries which grew out of the application of these priniciples in a school setting (cf., Trickett, Kelly and Todd, 1972).

1. The principle of interdependence. This principle is based upon the ecosystem in biological ecology. Stated simply, it asserts that the units within a ecosystem are interdependent. The principle suggests that any change in one component of an ecosystem creates changes in the relationships between other components of the system as well (Trickett, et. al, 1972).

Translated into programs for schools, this principle suggests that the development of new resources requires the creation of new relationships between components of a system (the school). As Rappaport (1977) has noted, this in turn means that the entire system must be well understood prior to intervening it. Such understanding can only come from careful observation of the local environment and not from a priori assumptions.

As within any ecological system, there are tensions or, what Kelly describes as "limiting factors." The concept of limiting factors points out the fact that while ecosystems contain a myriad of functions, some are more critical than others. Generally, the most important functions are those that are in relatively short supply and high demand. The principle of interdependence and the concept of limiting factors provide an excellent construct for undertaking the complex functions in the entry process and initial assessment of a school as a system.

2. The principle of cycling resources. This principle refers to both the utilization and replacement of energy forms in an ecosystem. The energy forms may be thought of as resources within the environment. For program development, it suggests that the interventionist discover and evaluate possible new ways in which the school can utilize its own resources, including its people, to initiate and sustain positive change. The principle implies: (a) an emphasis on locating resources and (b) the mobilization and redistribution of existing resources. Both implications are quite different from the helping profession's usual deficit model and are

consistent with a viewpoint which recognizes the strengths rather than the deficits of the ecosystem.

3. The principle of adaptation. This principle suggests that there is a continual development or change process operating, and that all people in a social structure (e.g., school building) are both influenced by this process and in turn influence it. The principle implies that people and environments are interactive and that adapation is relative to a particular environment. Moreover, behavior that is adaptive in one environment may not be so in others.

In order to change the school environment, the adapative skills it demands must to be uderstood. Further, the relationships between school and community, in terms of adaptive skills, need to be carefully assessed (cf. Trickett et. al., 1972).

4. The principle of succession. This principle emphasizes the fact that there is continual change of social organizations, giving rise to changing demands for adaptive capacities in both social and individual behavior. The dynamic equilibrium of communities and their environments change and recreate forces for change in the enviornment. This principle addresses the element of time. It emphasizes the need for a long-range time perspective when assessing environments and planning interventions.

Trickett, Kelly and Todd (1972) have elaborated those principles in an intervention program for high school environments. From their research they generated additional intervention and research guidelines for using an ecological model.

First, an ecological intervention must deal directly with local

conditions. This principle recognizes the interdependence of change efforts and ongoing processes in the environment. It also emphasizes the need to tailor interventions to particular requirements which are more likely to be valid for the setting.

Second, ecological interventions should be based on longitudinal assessment of the local setting. One cannot attempt to intervene in a complex setting without undertaking a long-term assessment of it. This principle emphasizes the need to understand the unique history of the setting. In the development of the SDP, the experience of the director (James P. Comer, MD.) played an enormous role in assessing the conditions which existed in the New Haven Public Schools. The SDP was based upon an assessment of the local district and the results of that assessment were applied to the prevention of problems within a newly opened school.

Third, effects of the intervention on people of the setting are anticipated, and efforts are made to reduce negative effects and enhance positive effects. The SDP was designed and implemented with a concern for social responsibility on the part of the university to the local community.

The reader should recall, during the 1960s and 70s there was a great deal of discussion concerning the university's role in problems affecting society as a whole and education in particular (Brazziel, 1973; Metzner, 1970). When the intervention work began in 1968, parents and community representatives expressed concern about "research for research sake" which benefitted the careers of the investigators but did not improve the schools and the students.

Fourth, a wide variety of potential intervention activities, mechanisms and components should be included. In a complex social system the number of potential solutions to problems are vast and may become as complex as the setting. It was clear to the designers of the SDP that whatever solution proposed within the two original schools would have to address problems of the entire ecosystem. Thus, a variety of major and minor components were incorporated.

The Assumptions and Rationale for SDP Components

The rationale for the intervention was derived from personal and professional experience with an understanding of learning and teaching problems often found in inner-city schools serving minority group populations. The experiences of the program director as a mental health consultant to schools lead to the conceptualization of a school-based approach rather than the standard individualized approach to intervention. Three major assumptions were made in 1967 on which the intervention was based and continues to function.

Assumption 1: Educational problems of inner-city children can be reduced or prevented by addressing the needs of both the children and the school itself.

This assumption reflects the ecological principle of interdependence: any change in one component of the system effects changes in the relationships between other components as well. In the case of the SDP, entry into the schools by the Child Study Center was precipatated by conditions in inner-city schools which educators and mental health professionals alike described in terms such as "crisis in the classroom," "death at an early age," and "a scenario

for a disaster" (cf. Silberman, 1970; Kozol, 1967; Comer, 1980b). The assessment by the interventionists of a school's resources for managing the extensive problems it faced indicated that the solution had to involve all participants who were directly or indirectly involved in the school. Emphasis was on the discovery of relationships within the school, on helping individuals (children, teachers and parents) to adapt to the school environment and on improving that environment as opposed to looking for the causes of the problems and whom to blame.

Counter to the prevailing thought about the sources of educational problems which contributed to children's academic underachievement (cf. Coleman, 1966), this assumption suggested that the management of the school be examined. A decision was made to intervene by improving the management and climate of the school.

In addition, it was thought that the problem of underachievement and behaviors associated with poor academic performance could be accounted for by: a) the fact that the children's pre-school experiences had not prepared them for the demands of the school environment and b) the complex structure and processes of the school frustrated the children, their parents and the school's staff. The interplay between the demand on children to acquire new adaptive skills coupled with the demand on schools to respond to the children's frustrations and anxieties created a negative environment in which academic achievement suffered. Moreover, it was thought that failure to achieve in the classroom was associated with classroom adjustment problems.

Assumption 2: A systematic educational program under strong leadership can substantially reduce the problems in a school.

This assumption accepts the reality of the ecological principle of cycling resources. It also reflects a philosophy that suggests that any improvement effort must come from within the school and can not be imposed from outside. This philosophy and intervention principle required the development of a process for changing the conditions in the school that allowed those most directly involved in the education of the children to implement the process. In this respect the intervention resembles a social change model. The SDP helped to redefine the manner in which teachers, staff and parents were to be utilized within a school.

Assumption 3: The academic and occupational aspirations of children are closely related to both their family's and their teachers' aspirations and expectations for them.

The ecological principle of adaptation clearly indicates that the school environment is an interactive situation in which the family and the school staff must constantly adapt to each other in order to coexist within the system. One of the problem areas to be addressed was home (i.e., parent) and school (i.e., the entire school staff) expectancies of children's academic achievement. This assumption has been consistently supported in the literature (Baker & Crist, 1971; Raudenbush, 1984; Smith, 1980).

Assumptions 4 and 5 also reflect the principle of adaptation:

Assumption 4: School improvement programs must have the active support of parents and staff in order to be successful.

Assumption 5: Active, positive interactions between parents and staff are essential for a successful school improvement program.

The reader should recall that during the late 1960s community interest was high in matters concerning children, education, social responsibility and self-determination. When the intervention was conceptualized it seemed only natural that parents and staff be included in all aspects of its functioning.

The School Development Program in New Haven

The intervention process is a systems-level primary prevention approach which addresses all aspects of the operation of the schools, including curriculum, climate, staff development and parent participation. In this sense the intervention is not a particular group of individuals or any targeted aspect of the school program. The past academic performance and psychological problem experienced by this population lead to notion that the entire school population was at risk. The reader should note that a Diagnostic Statistical Manual did not exist at the time of the program's inception. It was the interventionist's own experience with the schools which allowed a diagnosis. The objective was to improve students' academic achievement by focusing on (1) the school climate--the attitudes and interactions of staff, students and parents, and (2) students' adjustment and social skills.

When the intervention-research work began in 1968, parents and community representatives in New Haven expressed concern about the proposed new program being developed by the Child Study Center. As noted by Sarason (1971), many Black parents described Yale as an

institution that "uses our children as guinea pigs." For this and other reasons the major focus throughout the first 5 years of the project was on establishing, evaluating and refining the intervention in the initial experimental school, a field test school, the New Haven School System, and eventually the Benton Harbor School System.

Suchman (1970) pointed out that broad-based intervention programs, such as the School Development Program, often move through three stages: (1) the pilot stage, in which attention is focused on program development; (2) the model stage, in which attention is given to the objectives of the program; and (3) the prototype stage, in which results derived either from fundamental research or from experiences in life situations as demonstrated during the first two stages of the program are applied in a practical setting.

During the development and implementation of the intervention these stages were not easily discerned. Retrospectively, these three stages may be shown to emerge during the following time periods: 1968-1973; 1973-1975; and 1975-1980.

The Population

In 1968, one of New Haven's lowest achieving public schools and a newly opened school in a low income neighborhood were selected to participate in the School Development Program--Martin Luther King, Jr. (K-4) and Simeon Baldwin (K-6). The student populations at both schools were 99% black. Over 90% came from low income families, with over 50% of the families receiving Aid for Families with Dependent Children (AFDC). Students at both schools had very low scores on standardized tests in reading and mathematics. Both schools were

faced with chronic and extensive behavior problems and poor attendance by students and teachers alike.

This description of the student population is quite general. Yet that description, 10 years later and on a national level, would cover a minimum of six million children who would be considered "at risk" for psychiatric problems. In 1978, the Task Force on Pediatric Education identified several at risk groups which included:

a. Children from low-income families: There are 10.2 million low-income children under age 18; about one in six lives in poverty. The environmental and social stresses of such families contribute to increased mental health and substance abuse problems. These children usually have limited access to health and mental health services.

b. Children of racial minorities: There are approximately 12 million black, Mexican-American, Puerto Rican and American Indian children under age 18. They are more likely than nonminority children to experience poverty and are thus more likely to be at risk for both medical and psychiatric problems.

c. Single-parent children: Over 9 million children now live in single-parent families...Most of these children and families are at risk for emotional problems and are in need of anticipatory guidance and preventive mental health interventions.

Initial SDP Personnel

Initial work of the SDP with King School involved a four-person mental health team from the Child Study Center, consisting of a psychiatrist (Program Director, Dr. James P. Comer), psychologist, social worker and a helping teacher with a strong training background in school-related mental health issues.

This core staff established and was a part of a project-wide Steering Committee which attempted to identify problems and opportunities for input at the school level and identify and match resources to the problem/
opportunity areas. The Steering Committee included teachers and parents along with the CSC mental health team. This structure quickly evolved into school-based administrative teams and finally into what was known as the school governance and management group.

Four major program components were developed during the pilot phase: (1) the mental health service, (2) the representative governance and management group, (3) the parent participation program, and (4) curriculum and staff development programs. Specific intervention efforts evolved from and centered on these program components. The mental health team from the Child Study Center was as the core of the process, making an input to and facilitating the activities of the governance and management group and the parent and curriculum-staff development programs.

The mental health team provided the theoretical framework for the project's organization and operation. It did not attempt to deliver direct services to children, except in rare cases, nor did it attempt

to directly modify the behavior of school staff, parents or children. It worked primarily through each school's representative governance and management group. This group was responsible for planning, program implementation, evaluation and program modification in the areas of school climate, curriculum and staff development. The governance and management group acted on problems or opportunities directly or created new programs to address them as indicated (See Figure 1).

Insert Figure 1 about here

Research on the SDP

The Yale Child Study Center School Development Program has been working in collaboration with the public school system of New Haven since 1968 to develop a successful model of school intervention to facilitate improved psychological and academic development of inner-city children. A number of evaluation studies of the early phases of the program provide detailed descriptions of the model and evaluate its impact on children, parents and school staff (Comer, 1980a and 1980b; Comer, 1982; Comer, Schraft & Sparrow, 1980; Costello, 1973; Lehman et al., 1973; Schraft & Comer, 1979). These preliminary studies can be divided into two categories:

1. Impacts of the intervention from 1968 to 1983; and
2. Pilot study of New Haven follow-up in middle schools (1982).

Indirect Impacts of the Intervention

An indirect impact of the intervention may be seen in the changes within the entire New Haven Public School System and the Connecticut State Department of Education. The New Haven School System has adopted the principle of shared governance in its management of schools. Currently, a structure exists which is the system's equivalent of the governance and management group. It is called the Urban Academy. The Urban Academy monitors and implements new programs and policies which will enhance academic and mental health functioning within the entire school district.

Plans are underway to adopt the program in 14 school districts throughout the state. These plans are the result of the State's Commissioner of Education's, Dr. Gerald Tirozzi, direct contact with the intervention. Dr. Tirozzi served as Superintendent of the New Haven school district during the prototype phase of the intervention. The types of impacts resulting from the intervention during his tenure as Superintendent are now being seen as having implications for school districts around the state.

Direct Impacts

Evaluations of the SDP between 1968 and 1983--undertaken by outside evaluators as well as SDP staff persons--document positive changes in each of the outcome components of the intervention: (1) academic achievement; (2) attendance patterns; (3) level of behavior problems; (4) teacher and parent attitudes; and (5) curriculum innovations. Results of these studies are summarized. With reagard to student achievement: standardized test scores in reading and

mathematics improved significantly from 1969 to 1983 at intervention schools (i.e., King and Brennan).

Insert Table 1 about here

Further, student attendance at intervention schools improved in both actual percentages of absences and rank among all elementary schools.

Insert Table 2 about here

As for global behavior problems: suspensions at both schools were greatly reduced. There were no suspensions at either school during the 1979-80 school year. Referrals to the principal's office for disciplinary reasons were reduced.

Studies of participant attitudes indicated teacher attitudes about the school (as indicated by interviews and questionnaires) became more positive between 1975 and 1980. Parent attitudes were more positive about school programs and parents' ability to participate in school decision-making.

In addition, parents (especially those who had worked as classroom teacher assistants) had higher aspirations and expectations for their own and their children's future education and careers. Parents maintained a high level of involvement in the parent-teacher group, the school governance body and parent-teacher conferences.

Pilot Study

A pilot study was undertaken in the spring of 1982. In that study a group of 24 randomly selected 7th grade children who had attended an interventiion school (M.L. King) from kindergarten to 4th grade were compared to a control group of 24 7th graders who had attended a non-intervention elementary school. Both groups currently attend the same middle school. Experimental and control children were matched on sex and age. Data were collected to assess the following areas:

a) perceived physical, school, peer, self and overall competence;

b) achievement test scores; and

c) grade point averages.

Sources of data included the Perceived Competence Scale for Children (Harter, 1982) and school records. Analysis of data indicated several areas of significant differences between experimental and control children.

a. Perceived Social Competence

To examine differences in perceived social competence by group and sex, univariate ANOVA's indicated that children from the intervention reported significantly better perceived school competence, F (1,47) = 6.20, $p < .05$ than the control group. In terms of perceived physical competence, there was a trend toward a group by sex interaction, F (2,46) = 3.79, $p < .058$. Further analysis, with the Duncan method, revealed that within the intervention group, boys had better perceived physical competence than girls ($p < .05$). There was also a trend for experimental vs.

control children to report better perceived total competence, F (1,47) = 3.54, $p < .067$.

b. Achievement Test Scores

As the various subtests of the IOWA Test of Basic Skills are intercorrelated, a MANOVA was performed to examine differences in achievement subtests as a function of group. Analyses revealed a significant main effect of group on achievement test scores (Multivariate F (1,47) = 3.03, $p < .005$). Subsequent univariate ANOVA's on each subtest revealed that students who had attended the intervention school scored significantly better on all 11 of the basic skills subtests of the IOWA.

Insert Table 3 about here

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c. Grade Point Averages

Group differences in school grades were examined. Univariate ANOVA's revealed that intervention children had significantly higher averages in mathematics and in overall grade point average, F (1,47) = 5.48, $p < .05$, than the control children. There was also a trend for the intervention children to have higher averages in English than the control children, F (1,47) = 3.21, $p < .08$).

Conclusion

These pilot data suggests that there are positive effects, both intellectual and social, associated with attendance at an elementary school which participated in the SDP intervention process.

Furthermore, the data indicate that such effects are retained well past participation in the intervention (i.e., three years later). Thus, it would appear that this intervention process has a lasting impact.

These outcomes are primarily educational ones. They are strongly associated with several important mental health variables which suggest that the intervention may have had a long-term impact on children's mental health status.

Prevention and Public Policy

In Benton Harbor, Michigan, the court addressed the same problem that was addressed in Brown vs. Board of Education in 1954, that of educational inequality. It was decided by the court that the school district should desegrogate and implement the School Development Program. The process was implemented as a result of a legal decision to initiate education. The decision reflects the awareness within the school district that educational inequality existed and that something had to be done immediately. What is more important is that the decision recommended a specific mechanism of educational change. This was a rare procedure; often times legal decisions suggest general avenues for change but in this case, it spelled out a specific one.

The uniqueness of the judge's position, in prescribing a specific remedy is outlined and described in connection with the social environment as a context for the decision to initiate social change. As in all other large social change programs, the School Development Program has an ambitious goal: that of equalizing educational

opportunities for children and preventing social and psychological adjustmentsd difficulties. It has a comprehensive design; the implementation process is nothing short of a herculean task. Finally, the program has a host of interest groups observing both the desegregation process and the implementation of the program.

Insert Figure 2 about here

The educational interest groups are particularly concerned that the program address educational problems: equalizing educational opportunities for all children, raising of academic achievement scores and, increasing attendance. Social interest groups are interested in the desegregation aspect of the program and the effects of desegregation on children, parents, and teachers involved. The legal community is interested not only in the desegregation aspect but, the efficacy of the prescribed remedy (i.e., does the program work?). The mental health community is interested in the psychological implications of the program (i.e., does the program prevent adjustment and learning disorders?). The community, as a whole, is interested in the program because it directly involves their future. (The community is being defined here as the sociocultural environment in which the children, teachers and parents live.) The academic community is interested in the program because it provides an opportunity to test hypotheses and build upon theory.

<u>The Program in Benton Harbor, Michigan</u>

The following brief historical perspective provides

information regarding of the social context in which the prevention program was initiated. Benton Harbor, Michigan at the time of the court decision, was undergoing social and economic stress. Since 1967, the Benton Harbor Area Schools have been in litigation for operating a segregated school system.

The school district is the largest school district serving Berrin County. Over the past 16 years the racial make up of the schools has shifted from 37% black student enrollment in 1966 to the current level of approximately 78 percent.

In 1978, the district was ordered to desegregate. As often occurs in communities where there is resistance to desegregation, may whites fled the city, resulting in a loss of tax revenues. Economically, the community of 15,000 was derpressed with one of the highest rates (25%) unemployment in the State of Michigan. Concerns for the future of the children in the school district brought national attention to the community. In the spring of 1980, Judge Douglas W. Hillman ordered the academic program of the schools of Benton Harbor be improved using the School Development Program. The order was part of a remedy in the desegration suit.

The appropriateness of the decison can only be measured aagainst the relative educational achievement of the children in the district. Prior to the implementation of the court order in September 1981, 11 of 21 elementary schools and all three junior high schools were identified as "high needs" schools based on student performances in reading and mathematics on the Michigan Educational Assessment Program. In 1982, the district retained approximately

one-fifth of its kidergarten, first and second grades. A staggering 105 out of 666 kindergrten pupils failed--as did 180 of the district's 744 first grades and 174 out of 673 second graders.

The desegregation order and the SDP wre initiated independently of each other. Now they are operating a single tool to improve the learning and achievement and to prevent the onset of psychological disorders among the children in Benton Harbor. The professional literature (e.g. Weber, 1971; Brookover and Lezotte, 1977; Edmonds, 1978; Comer, 1980) suggests that the model chosen to improve learning contains the critical elements necessary for positive change.

A number of variables have been identified as contributing to quality education and may be grouped into three categories: ideology; school structure of organization and instructional practices. The ideology of the SDP encourages the systematic movement toward the provision of quality education to all children. Fundamental to the ideology is that all children can learn. Coupled with that fundamental belief are high expectations for all students.

The use of this particular change and prevention process requires the recognition of the fact that schools are social systems and that there is no single variable which explains quality education or sucessful psychosocial adjustment. Further, a single characteristic (e.g. Parent pariticipation) may function differently in different schools. Other organization components (e.g., the mental health team) may operate just as differently among schools.

The schools engaging in the process of change and prevention have develop a clearly articulated plan for school improvement. Each

school's plan clarifies the objectives or mission of the school for all pariticipants involved in the process. The school's instructional practices are also delineated within the plan. The plan allows teachers to become more aware of the objectives and learning tasks of the children. Further, parents understand and are able to support the basic mission of the school and are made to feel that they play an important role in achieving the school's mission. While each school invovled in the process has its own plan for improvment, they can be described as seeking to:
(a) improve the social and psychological climate of the school to faciliate learning, (b) improve academic achievement in reading and mathematics, (c) improve social skills of students and (d) improve interpersonal skills and mental health sensitivity of school personnel.

The educational interest groups

Interventionists are notorious for initiating programs, becoming involved in the school for a couple of years and exiting without providing solutions to the complex problems in the school environment. Much of the success of the intervention in New Haven has been its integral involvement with school admistrators, teachers and parents over an extended period of time. Clearly, the long-standing cooperation between the program and the school in New Haven suggests that prevention programs must be accepted and supported by the entire school community. Futher, programs must demonstrate its long term commitments to change and prevention and not regarded as simply another progra in the long line of programs

which come and go.

The court mandate has in some ways enhanced the probability of the program's success in Benton Harbor. A survey of teachers in four intervention schools indicated that without the desegregation order, the SDP or one like it would have been implemented. In many ways the entry-level resistance to change was minimized.

The intervention requires a new set of relationships to be be formed within the school. Specifically, it requires prinicpals to share their governance and management power in very direct ways with teachers, parents and mental health service providers. The direct interaction between representative prarent and teacher groups working together, as well as parents in the classroom, provides for accurate identification of the needs of children as well as solutions provides the opportunity for (a) sharing perspectives on the needs and problems (b) identifying available resources and (c) increasing trust between the important adult in the children's lives.

These changes are not automatic. Tensions develop over issues such as power and responsibility. The SDP attempts to short-circut these tensions and attributing blame for current conditions in the schools through the adoption of a "no fault" policy. This policy identifies the children's and school's needs and begins with an immediate search for opporunities to address those needs--without blaming anyone.

Psychological

The inclusion of a mental health team in the school lead parents and teachers to consider together the best interest of the child.

The mental health team (MHT) functions much like the Individualized Education Program (IEP) process. The team reviews with the principal, parents and referring teachers the problem experienced by children and seeks solutions which will allow the child to remain in regular classroom and receive the needed support to facilitate adjustment in the school environment.

The MHT, in essence, assists the school in redefining the manner in which mental health professionals are utilized. The team focuses upon the use of psychological skills in a prevention rather than in usual testing and subsequent removal of children from regular classroom setting.

Legal Interests

The implementation of the SDP in Benton Harbor, Michigan is an illustration of judicial policy-making process. It was a process by which issues were recognized and decided as a result of community interaction and the integration of values of an individual judge. It consisted of the values of the judge and the issues--his perceptions about the policy and factual questions raised by the case before the court for a decision.

As a concept, prevention poses no serious problem for psychology and mental health professions. However, the problems in implementation of programs and services may prove problematic, especially if we are to move beyond the individual case to system-based service delivery.

It should be noted that the court, in ordering the implementation of the SDP had to consider the replicability of the program.

Implications of a Court Ordered Prevention Program:

In recent development of policy, legislation obviously has played a most significant role. At the same time, it is highly questionable whether we can arbitrarily segregate the work of courts from such legislative policy-making. It is true that the legislature can more easily and rapidly introduce very broad changes in public policy. The courts are restricted by the adversary procedure to the settlement of specific disputes before them and to the consideration of only specific disputes before them and to the consideration of only those particular issues raised by the partices to those disputes (Schur, 1968).

Whether or not we perceive ourselves as having the answers to the complicated organizational and change issues involved in prevention services with system-based interventions, others perceive us having them or at least as able to provide the most reasonable solutions. This places pschologists in a tenuous position--having to provide answers and solutions to which we do not fully understand or having to take giant steps when research and theory only permits baby steps.

Conclusions and Implications for Policy

One obvious implication is that further research on the SDP is necessary. The program honored parents request that data not be published (a) before the program had made a significant and long-lasting impact upon the schools involved and (b) could demonstrate positive results that could applicable to similar settings and populations. The School Development Prorgram has begun systematic study of the impact of the program on the climate of

schools, teachers, parents and children in Benton Harbor, Michigan. A long-term followup study in underway to assess the impact of the SDP on middle and high school children who attended intervention elementary schools in New Haven. Psychological, educational and social adjustment variables are included in this new series of studies.

Since much of the prevention research has been supported by federal grants, this need for continued research is itself a public policy issue. If the crucial question of whether poor school climate and poor home-school relationships exacerbates academic failure and maladjustment in young children is to be answered definitely, there must in turn be continued support for research. This is particularly crucial since so many children have been shown to be at risk for developmental difficulties and academic failure because of a variety of other social factors (eg., social class and parental education).

In her study of applied research in the 1970s, Bourque (1982) concluded that programs studied (in the educational arena) in the best evaluations are those of least relevance to persons with broadly defined interests in innovative program and policy development (primarily because they had as their objective the minor modification or fine tuning of well established programs).

Preventing childhood maladjustment and behavioral disorders and its pernicious consequences must be given priority in the mental health policy arena. Too many children have already been harmed because of the nation's failure to assume an aggressive position of knowledge utilization concerning the prevailing problems in school

environments.

Despite the need for further research, there are obvious practical implications of the SDP model to date.

1. Children's problems can rarely be resolved or prevented with short-term effort and ineffective action strategies.

Psychological action strategies coupled with research can influence social policy under certain circumstances. Whether we are speaking of well researched programs or long-standing action models they must be clearly articulated and must have specific plans for implementation that do not yield in the face of contemporary socio-political values.

2. Children's who are at risk are of interest to a wider audience than we normally address.

Social scientists and interventionists will not influence policy by limiting their reports and models to their collegues and by ignoring the role of vaules in policy formation. The interchange of opinion between law and mental health professionals clarifies perception of concepts and positions of each other. In a climate of understanding we should be able to articulate the needs of children who are at risk.

The law's method of inquiriy, while it attempts to be dispassionate differs substaintially from scientific inquiry. The fundamental aim of law is justice while that of science in knowledge or truths. Results in law are primarily practical, and only secondarily theoretical (Slovenko, 1973).

As research-scientists there are critical demands which must be

met before our data is acceptable as valid. HOwever, as research-practioners, we must recognize and act on critical risk factors that manifest themselves so clearly that as having an affect on the lives of children.

Although education is not mentioned as at right in the United States Consitution, a doctrine is gradullay being articulated through case law (e.g. Brown vs. Board of Education and the Pennsylvania Association for Retarded Citizens v. Commonwealth of Pennsylvania). Further, this doctrine is being coupled with the the notion of quality eduction education which may include a the systematic change of the school environment so as to prevent childhood disorders and enhance psychological adjustment. This policy suggests that educational services should be designed to meet the needs of children who are at risk.

The focus of attention is the process of identifiying injustices that inturn become redefined as rights. The idea that all children can learn and have the right to attend schools, which promote not only academic and social growth, but enhances psychological adjustment and prevent disorders may be attributed to wishful thinking. The translation of legal ideas into practice is difficult to accomplish. However, it is facilitated by well thought out and tried action stategies of prevention, such as the School Development Program.

The implementation and replication of the School Development Program has been supported by an important policy-maker outside of federal funding sources which permits its expansion. The program has

been kept alive for 17 years because of the director's innovation. Whatever the future holds, the program must be supported and protected to keep it in place and use it as a base for advancing theoretically sound principles of social change and primary prevention.

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Table 1

Mean Grade Equivalent Scores,
Reading and Mathematics*

4th Graders at Intervention Schools

1969-1980

	Year	Expected Score	Reading	Mathematics
School1	1969-70	4.2	3.0	2.9
	1977-78	4.2	3.4	3.7
	1978-79	4.2	3.6	3.9
	1979-80	4.2	3.9	4.0
	1980-81	4.8	4.5	4.8
	1981-82	4.8	4.4	4.9
	1982-83	4.8	5.2	4.9
School2:	1969-70	4.2	3.1	3.5
	1977-78	4.2	3.2	3.2
	1978-79	4.2	3.4	3.6
	1979-80	4.2	3.5	3.7
	1980-81	4.8	4.2	4.3
	1981-82	4.8	4.2	4.2
	1982-83	4.8	4.8	5.1

*1969 scores are from the Metropolitan Achievement Test; all other scores are from the IOWA Test of Basic Skills.

Data source: Dr. Martin Klotz, Coordinator of Research and Evaluation, New Haven Public Schools

Table 2

Student Attendance

Average Percentage in Attendance:
Intervention Schools,

1975-1983

Year	All Elementary Schools	School1	(Rank)*	School2	(Rank)*
1975-76	90.3	92.9	(6)	91.1	(14)
1976-77	91.2	94.5	(2)	92.6	(8)
1977-78	90.3	93.0	(4)	91.7	(11)
1978-79	91.0	93.8	(3)	93.3	(7)
1979-80	90.8	93.6	(4)	93.7	(2)
1980-81	90.6	94.2	(1)	91.3	(13)
1981-82	88.6	94.1	(2)	93.5	(4)
1982-83	88.8	95.0	(1)	93.0	(5)

*Rank order is based on a varying total number of elementary schools in New Haven: 1975-76, 31 schools; 1977-78, 27 schools; 1979-82, 28 schools; 1983, 25 schools.

Data source: Office of Research and Evaluation, New Haven Public Schools

Table 3

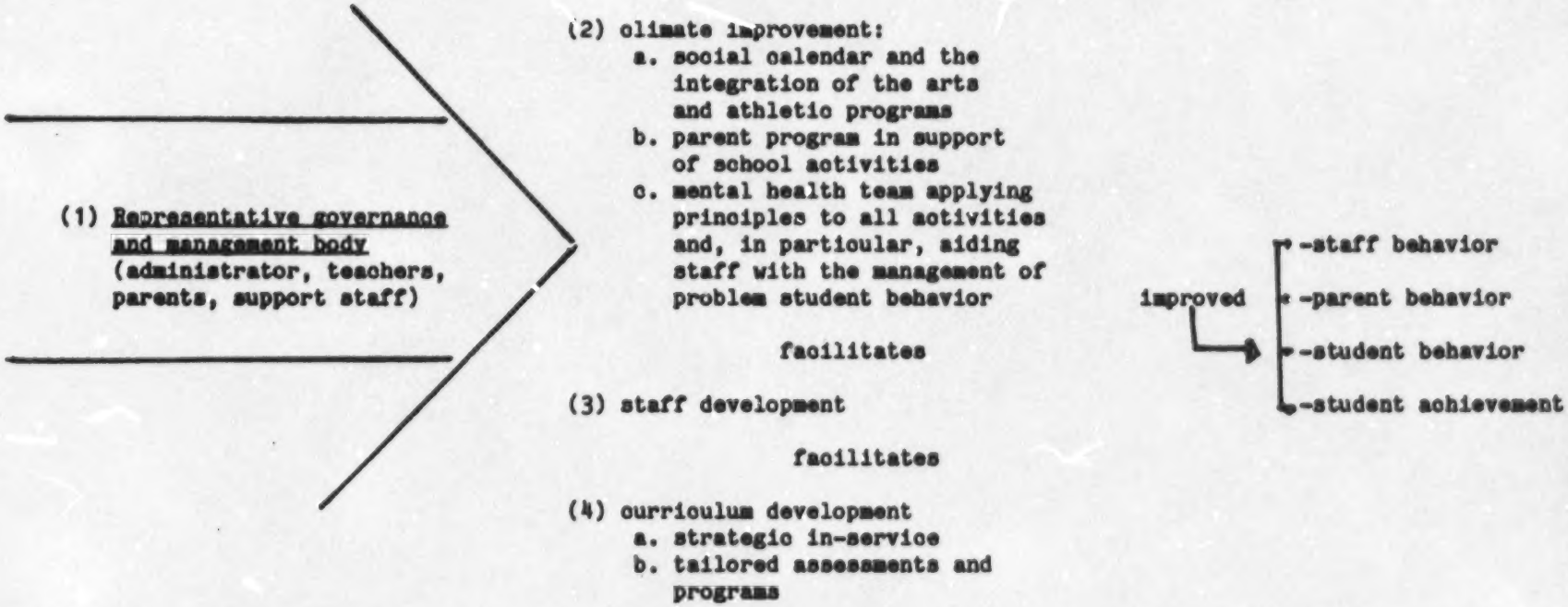
Mean grade equivalents for Intervention and control children on the IOWA Test of Basic Skills. (Test was administered in May when students were in the ninth month of the seventh grade.)

IOWA Scores	Interv $\bar{X}$	Control $\bar{X}$	F	P<
Language Skills				
Vocabulary	6.88	5.12	20.22	.0001
Reading	7.28	5.60	19.67	.0001
Spelling	7.52	5.38	14.95	.001
Capitalization	7.50	5.03	17.26	.0001
Punctuation	7.95	5.80	20.83	.0001
Language Usage	7.90	5.18	24.12	.0001
Language Total	7.70	5.34	27.62	.0001
Work Study Skills				
Visual Materials	6.58	4.96	9.08	.005
Reference Materials	7.28	5.97	9.46	.005
Work Study Skills	6.95	5.46	13.01	.001
Mathematics Skills				
Mathematics Concepts	7.25	5.94	9.93	.005
Mathematics Problem Solving	7.12	5.73	9.58	.005
Mathematics Computation	7.28	6.49	6.46	.05
Mathematics Total	7.22	6.05	9.65	.005
Composite	6.90	5.56	9.65	.005

Figure 1

The Yale Child Study Center School Development Program

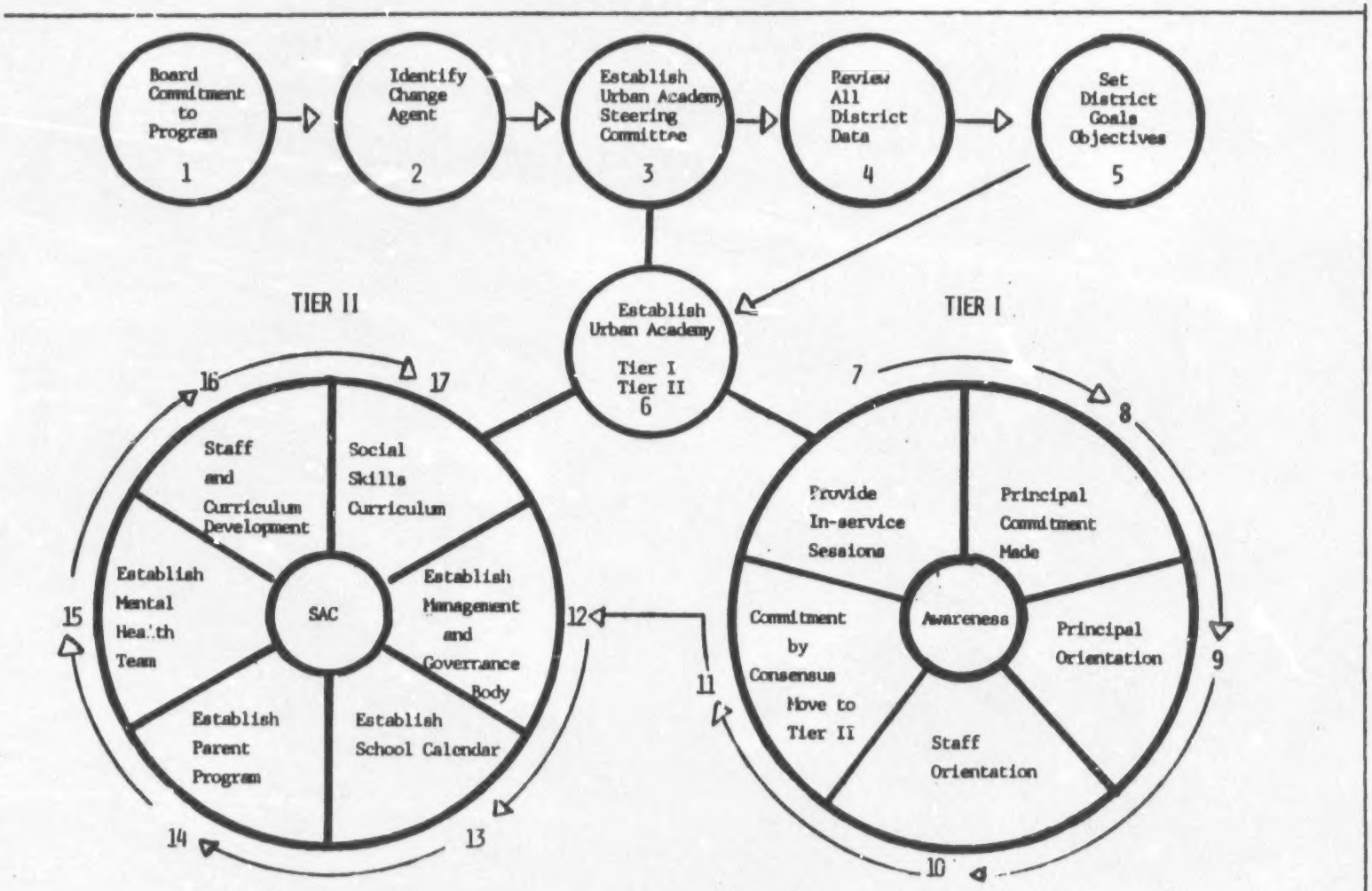
This model evolved to its present form from efforts initiated in 1968.[a]


(1) Representative governance and management body (administrator, teachers, parents, support staff)
(2) climate improvement:
a. social calendar and the integration of the arts and athletic programs
b. parent program in support of school activities
c. mental health team applying principles to all activities and, in particular, aiding staff with the management of problem student behavior
facilitates
(3) staff development
facilitates
(4) curriculum development
a. strategic in-service
b. tailored assessments and programs
improved
-staff behavior
-parent behavior
-student behavior
-student achievement

[a] cf. Comer (1980) School Power

Figure 2

Process Steps for Implementing the School Development Program [a]



[a] Developed by Erma Mitchell, Coordinator School Development Program, Benton Harbor Area Schools